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**COMBINED DECLARATION AND POWER OF ATTORNEY**

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL,  
DIVISIONAL, CONTINUATION OR CIP)

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As a below named inventor, I hereby declare that:

**TYPE OF DECLARATION**

This declaration is of the following type: *(check one)*

- ☒ Original  
☐ Supplemental  
☐ Design

- ☐ National Stage PCT  
☐ Divisional  
☐ Continuation  
☐ Continuation-in-Part (CIP)

**INVENTORSHIP IDENTIFICATION**

NOTE: *If the inventors are each not the inventors of all the claims an explanation of the facts, including the ownership of all the claims at the time the last claimed invention was made, should be submitted.*

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

\_\_\_\_\_  
COMMUNICATION NETWORK SYSTEM

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the specification of which: *(complete (a), (b) or (c))*

- (a) ☒ is attached hereto.
- (b) ☐ was filed on \_\_\_\_\_ as  
☐ Serial No. \_\_\_\_\_ or  
☐ Express Mail No. \_\_\_\_\_, as Serial No. not yet known  
and was amended on \_\_\_\_\_. *(If applicable)*
- (c) ☐ was described and claimed in PCT International Application No. PCT/\_\_\_\_\_  
filed on \_\_\_\_\_ and as amended under PCT Article 19 on \_\_\_\_\_. *(If any)*

**ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR**

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above, and that the filing of said specification, if heretofore filed, was authorized by me.

I acknowledge the duty to disclose information which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

**CLAIM OF PRIORITY OF EARLIER FOREIGN APPLICATION(S) UNDER 35 U.S.C. §119(a)-(d)**

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

*(List prior foreign/PCT application(s) filed within 12 months (6 months for design) prior to this U.S. application.)*

**NOTE:** Where item (c) is entered above and the International Application which designated the U.S. claimed priority check item (e), enter the details below and make the priority claim.

| COUNTRY<br>(or PCT) | APPLICATION NO.<br>(Day/Month/Year) | DATE OF FILING | PRIORITY CLAIMED<br>UNDER 35 USC §119                               |
|---------------------|-------------------------------------|----------------|---|
| Japan               | 2000-184312                         | 20 June 2000   | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO |
|                     |                                     |                | <input type="checkbox"/> YES <input type="checkbox"/> NO            |

**CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. §119(e)**

I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional application(s) listed below:

*(List prior U.S. provisional applications.)*

| PROVISIONAL APPLICATION NO. | FILING DATE<br>(Day/Month/Year) |
|-----------------------------|---------------------------------|
|                             |                                 |
|                             |                                 |
|                             |                                 |

**CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. 120**

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in such prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

*(List prior U.S. applications or PCT international applications designating the U.S. for benefit under 35 U.S.C. §120.)*

**U.S. APPLICATIONS****STATUS** (Check One)

| U.S. SERIAL NO. | U.S. FILING DATE<br>(Day/Month/Year) | Patented                 | Pending                  | Abandoned                |
|-----------------|--------------------------------------|--------------------------|--------------------------|--------------------------|
| 0 /             |                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 0 /             |                                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**PCT APPLICATIONS DESIGNATING THE U.S.****STATUS** (Check One)

| PCT APPLN. NO. | PCT FILING DATE<br>(Day/Month/Year) | U.S. SERIAL NOS.<br>ASSIGNED (If any) | Patented                 | Pending                  | Abandoned                |
|----------------|-------------------------------------|---------------------------------------|--------------------------|--------------------------|--------------------------|
| PCT/           |                                     |                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| PCT/           |                                     |                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**35 USC 119 PRIORITY CLAIM, IF ANY, FOR ABOVE LISTED U.S./PCT APPLICATIONS**

| PRIORITY<br>APPLICATION NO. | PRIORITY<br>COUNTRY | FILING DATE<br>(Day/Month/Year) | ISSUE DATE<br>(Day/Month/Year) |
|-----------------------------|---------------------|---------------------------------|--------------------------------|
|                             |                     |                                 |                                |
|                             |                     |                                 |                                |
|                             |                     |                                 |                                |

**POWER OF ATTORNEY**

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office in connection therewith:

Charles R. Hoffmann, Reg. No. 24,102; Ronald J. Baron, Reg. No. 29,281; Gerald T. Bodner, Reg. No. 30,449; Alan M. Sack, Reg. No. 31,874; A. Thomas Kammer, Reg. No. 28,226; R. Glenn Schroeder, Reg. No. 34,720; Glenn T. Henneberger, Reg. No. 36,074; Irving N. Feit, Reg. No. 28,601; Anthony E. Bennett, Reg. No. 40,910; Gregory W. Bachmann, Reg. No. 41,593; Steven T. Zuschlag, Reg. No. 43,309; Susan A. Sipos, Reg. No. 43,128; Kevin E. McDermott, Reg. No. 35,946; Robert C. Morriss, Reg. No. 42,910; Roderick S.W. Turner, Reg. No. 38,639; James F. Harrington, Reg. No. 44,741; Algis Anilionis, Reg. No. 36,995; Justin K. Holmes, Reg. No. 42,666; and Joseph J. Catanzaro, Reg. No. 25,837 each of them of HOFFMANN & BARON, LLP, 6900 Jericho Turnpike, Syosset, New York 11791; and Daniel A. Scola, Jr., Reg. No. 29,855; Salvatore J. Abbruzzese, Reg. No. 30,152; Kellyanne Merkel, Reg. No. 43,800; Keith R. Lange, Reg. No. 44,201, John Sopko, Reg. No. 41,321, and Barry Jacobsen, Reg. No. 43,689, each of them of HOFFMANN & BARON, LLP, 1055 Parsippany Boulevard, Parsippany, New Jersey 07054.

PLEASE SEND CORRESPONDENCE TO:

PLEASE DIRECT TELEPHONE CALLS TO:

HOFFMANN & BARON, LLP  
6900 Jericho Turnpike  
Syosset, NY 11791

(516) 822-3550

#### DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

#### SIGNATURE(S)

Full Name of Sole or First Inventor:

Youiti KADO

Country of Citizenship:

Japan

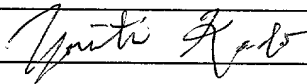
Residence Address: c/o ATR Adaptive Communications Research Laboratories  
2-2, Hikaridai, Seika-cho, Soraku-gun, Kyoto, Japan

Post Office Address:

Same as Above

Date: June 13, 2001

Inventor's signature



Full Name of Second Joint Inventor:

Masakatsu KOSUGA

Country of Citizenship:

Japan

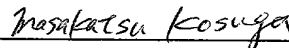
Residence Address: c/o ATR Adaptive Communications Research Laboratories  
2-2, Hikaridai, Seika-cho, Soraku-gun, Kyoto, Japan

Post Office Address:

Same as Above

Date: June 13, 2001

Inventor's signature



Full Name of Third Joint Inventor:

Country of Citizenship:

Residence Address:

Post Office Address:

Same as Above

Date:

Inventor's signature

NOTE All above spaces identifying inventors must be completed or deleted before any inventor executes this application

Attorney's Docket No. \_\_\_\_\_

Applicant or Patentee: ATR Adaptive Communications Research Laboratories

Serial or Patent No.: \_\_\_\_\_

Filed or Issued: \_\_\_\_\_

For: COMMUNICATION NETWORK SYSTEM**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY  
STATUS (37 CFR 1.9(f) and 1.27(c))--SMALL BUSINESS CONCERN**

I hereby declare that I am

☐ the owner of the small business concern identified below:☒ an official of the small business concern empowered to act on behalf of the concern

identified below:

NAME OF CONCERN ATR Adaptive Communications Research LaboratoriesADDRESS OF CONCERN 2-2, Hikaridai, Seika-cho, Soraku-gun, Kyoto, Japan

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under Section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third-party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed, to and remain with the small business concern identified above with regard to the invention, entitled:

COMMUNICATION NETWORK SYSTEMby inventor(s) Youiti KADO and Masakatsu KOSUGA

described in:

- ☒ the specification filed herewith.  
☐ application serial no. \_\_\_\_\_, filed \_\_\_\_\_.  
☐ patent no. \_\_\_\_\_, issued \_\_\_\_\_.

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights in the invention is listed below\* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 35 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

\*NOTE: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27).

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

☐ INDIVIDUAL      ☐ SMALL BUSINESS CONCERN      ☐ NONPROFIT ORGANIZATION

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

☐ INDIVIDUAL      ☐ SMALL BUSINESS CONCERN      ☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small business entity is no longer appropriate. (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Bokuji KOMIYAMA

TITLE OF PERSON OTHER THAN OWNER President of ATR Adaptive Communications Research Laboratories

ADDRESS OF PERSON SIGNING c/o ATR Adaptive Communications Research Laboratories,  
2-2, Hikaridai, Seika-cho, Soraku-gun, Kyoto, Japan

SIGNATURE B. Komiyama Date June 13, 2001